

# Disinfection of Water Supply Pipes

Under the current Water Supply (Water Fittings) Regulations 1999, local requirements and associated guidance, you are required to disinfect your underground pipe work prior to being connected to United Utilities' mains network. Please read carefully and follow the requirements documented in the guidance publications listed below.

Your new water supply pipe connection is subject to a successful disinfection, satisfactory sample results where applicable and other conditions of supply being attained. Failure to follow procedure may result in a delayed connection, the re-disinfection of your pipe(s) and resampling, where applicable, at your own expense.

## What pipework needs disinfecting prior to connection?

In order to safeguard water quality and reduce the risk of contamination, United Utilities require the disinfection, also known as chlorination, of all water supply pipe connections (including fire supplies) with a 63mm outside diameter and above, prior to connection to the mains network.

The pipework should be disinfected from the point of connection to the first internal stop tap. Upon completion of works, a **disinfection certificate** will be issued. This should be

forwarded to us, ideally 10 days prior to your connection date, as we cannot authorise a connection without it. Certificates are valid for 30 days from the date of disinfection.

For 90mm (outside diameter) connections and above, in addition to disinfection and certification, we also require samples to be taken post disinfection and sent for microbiological analysis to a UKAS accredited lab.

A certificate showing the results of the analysis will be issued and should be forwarded to us, together with the disinfection certificate prior to your planned start date.

A list of accredited laboratories can be obtained at [www.ukas.com](http://www.ukas.com)

**Important: It is your responsibility to ensure that your designated disinfection company are familiar with both national and local disinfection requirements. Operatives should be suitably trained in the disinfection process and all aspects of disinfection specific risk awareness. We also strongly recommend providing them with a copy of these guidance notes.**



Other circumstances where disinfection may be a requirement of connection: Pipework that has previously been connected to any other supply other than the United Utilities' mains network e.g. spring, borehole other water source. The water supply pipe has not been in use i.e. installed and left for a prolonged period of time. Risk assessment required If it is known/suspected that contaminants have entered the pipework during installation or there is concern due to the proximity of pipework to floodwater, sewage etc.

**Note:** List not exhaustive

### Guidance publications:

*Disinfection of water supply pipes must only be carried out using the methodology set out in the publications listed below:*

**BS EN 806-5:2012** – Code of practice detailing specific requirements and gives recommendations for the operation and maintenance of potable water installations within buildings and for pipework outside buildings but within the premises in accordance with **BS EN 806-1**

**BS 8558:2015** – Provides complementary guidance to BS EN 806 and offers detailed information on the design, installation, testing, operation and maintenance of domestic water services

**PD 855468:2015** – Improved guide to the flushing and disinfection of services supplying water for domestic use within buildings and their curtilage

**BS EN 805** – Requirements for systems and components outside buildings

**UUCESWI – Issue 7: 2018** – United Utilities' standard specification for civil engineering

**Water Supply (Water Fittings) Regulations 1999** (Schedule 2, Section 4 – G13 R13)

# Disinfecting agent

United Utilities preferred disinfecting agent is Sodium Hypochlorite

*Important: The use of any other agent should be agreed in advance and the relevant certification should be provided confirming its approval under Regulation 31 of the Water Supply (Water Quality) Regulations 2016 (as amended), together with the concentration levels required for safe and effective use and the guidance that supports this.*

Only those chemicals listed in the current Drinking Water Inspectorate's List of Substances and Products approved under Regulation 31 of the Water Supply (Water Quality) Regulations 2020 are acceptable for use with water supply pipe installations. It is essential that manufacturer's instructions are followed in respect of the concentration levels of disinfecting agents in order to avoid damage to materials or coatings within the water system.

## When do you need to disinfect your water supply pipe?

The disinfection of your water supply pipe should be completed after pressure testing and within 30 days of your connection being made. **\*\*We strongly advise against disinfection until you are in receipt of your planned connection date.**

*Note: Disinfection Certificates are valid for 30 days before United Utilities make the connection*

### Example certificate

Certificates can be generated in any format, providing details of the disinfection procedure and the results are satisfactorily documented.

### What information is required on a disinfection certificate?

- Site address
- Size, length and diameter of pipe
- Standard of procedure i.e. guidance document referred to eg PD 855468
- Disinfecting agent
- Concentration level of disinfectant
- Contact time exposed to elevated disinfection concentration
- Post disinfection concentration level after one hour
- Post disinfection concentration level after flushing out the disinfection agent
- Confirmation that pipe was securely capped and watertight after disinfection
- Engineer's name
- Signed and date of successful disinfection

### Certificate of Disinfection

Site Address: Gringotts, Privet Drive, Liverpool, L1 0RP

Material: HDPE

Length: 150 metres

Diameter: 90mm

Standard of procedure: PD 855468:2015

Disinfecting agent: Sodium Hypochlorite

Concentration level: 50 ppm

Contact time exposed to elevated disinfection concentration: One hour

Post Disinfection concentration level after one hour: 49 ppm

Post concentration level after flushing out the disinfection agent: 0.2 ppm

Confirmation that pipe was securely capped and watertight after disinfection: YES

Engineer's Name: Irwin Fletcher

Signed: \_\_\_\_\_ Date of successful disinfection: \_\_\_\_\_

Unit 7,  
Cahill Industrial Estate,  
Southport, PR9 1UG  
Tel: 01704 999999

**Acme Trading**  
Technical Compliance Services

### Microbiology Analysis Report (only for 90mm (O/D) supply pipe connections and over)

#### Microbiology Analysis Report: Water Supply Pipe

Tag: 61679104

Bottle Number: C010173200

Sampled Date: 29/03/2023 13:30

Purpose Code: SDNEMA

Monitoring Point: 19003: New water supply pipe

Samplers Comments: Acme Trading, Cahill Industrial Estate, Southport, PR9 1UG

#### Field Tests

COLIFORMS: 0 Count/100ml  
ECOLI: 0 Count/100ml  
CLOSTRIDIA: 0 Count/100ml  
ENTEROCOCCI: 0 Count/100ml

MICROBIOLOGICAL ANALYSIS: PASSED

Report generated

